

**REMARKS**

Claims 1-18 are pending in the application.

Claims 5-8 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Stewart et al. "A Real-time, Interactive Method for Fast Modification of Large-Scale CAE Mesh Models", published September 2000 in view of Beale (U.S. 5,923,329). The applicant traverses this rejection.

The paper cited by the Examiner was authored by the Paul Stewart, Pietro Buttolo and Yifan Chen. This paper is cited in the invention disclosure for Patent Application Publication Number 2002/0183986 (Serial No. 09/681,732), which is assigned at Reel 013987/Frame 0838 to Ford Global Technologies, LLC of Dearborn, Michigan. The inventors named in the present application are Paul Stewart, Yifan Chen and Anne Marsan. The present application is also assigned at Reel 013987/Frame 0838 to Ford Global Technologies, LLC of Dearborn Michigan. Thus, there is a commonality of inventorship and ownership between the cited paper and the present application.

The Applicant respectfully submits that the present application, Serial Number 10/020,362, and the cited paper (US 2002/0183986) were, at the time the present application was made, each wholly owned by Ford Global Technologies. Applicant submits that 35 U.S.C. §103(c) is applicable, since the subject matter of each and the claimed invention were, at the time the invention was made, subject to an obligation of assignment to the same person.

Therefore, the primary reference to Stewart is not prior art since there is a commonality of ownership as well as inventorship between the primary reference and the present application. It is respectfully submitted that claims 5-8 and 12 are allowable over the rejection under

35 U.S.C. §103(a). The Applicant would be willing to file a terminal disclaimer if U.S. Patent Application Number 09/681,732 issues during the pendency of this application.

Claims 1-2 and 4 were rejected under 35 U.S.C. §103(a) as being unpatentable over Stewart et al. "A Real-time, Interactive Method for Fast Modification of Large-Scale CAE Mesh Models", published September 2000 in view of Beale (U.S. 5,923,329) and Hariya et al. (6,578,189). The application traverses this rejection for the reasons set forth above. In addition, the Beale reference is distinguishable since it does not disclose a system and method that eliminates the need to update the CAD model to evaluate the effect of a change to a design parameter, as disclosed by the Applicant. The Hariya et al reference is distinguishable since it merely discloses a hexahedral mesh generation device that generates a hexahedral mesh that is available for use in other analysis, such as a CAE analysis, and the mesh is stored in a model database. These references do not disclose a method of taking a mesh model, performing a CAE analysis and using that analysis to vary a design parameter using direct surface manipulation of the mesh model and to update the model based on the updated parameter.

It is respectfully submitted that claims 1-2 and 4 are allowable over the rejection under 35 U.S.C. §103(a).

Claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Stewart et al. "A Real-time, Interactive Method for Fast Modification of Large-Scale CAE Mesh Models", published September 2000 in view of Blacker, U.S. Patent No. 5,315,537. The Applicant traverses this rejection for the reasons set forth above. The Blacker reference is distinguishable since it merely discloses a method of generating a mesh for use in finite element analysis, and not a method of taking a mesh model, performing a CAE analysis and using that analysis to vary

a design parameter using direct surface manipulation of the mesh model and to update the model based on the updated parameter.

It is respectfully submitted that claim 9 is allowable over the rejection under 35 U.S.C.

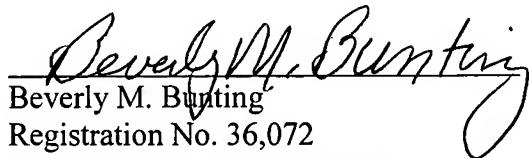
§103(a)

Claims 10, 11 and 13-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Stewart et al. "A Real-time, Interactive Method for Fast Modification of Large-Scale CAE Mesh Models", published September 2000 in view of Blacker, U.S. Patent No. 5,315,537 and further in view of Beale (5,923,329). The Applicant traverses this rejection for the reasons set forth above.

It is respectfully submitted that claims 10, 11 and 13-18 are allowable over the rejection under 35 U.S.C. §103(a).

Based on the above, Applicant submits that the claims are in a condition for allowance, which allowance is respectfully solicited. If the Examiner finds to the contrary, it is respectfully requested that the undersigned in charge of this application be called at the telephone number given below to resolve any remaining issues.

Respectfully submitted,

  
\_\_\_\_\_  
Beverly M. Bunting  
Registration No. 36,072  
Gifford, Krass, Groh, Sprinkle,  
Anderson & Citkowski, P.C.  
2701 Troy Center Drive, Suite 330  
P.O. Box 7021  
Troy, MI 48007-7021  
(248) 647-6000

Attorney for Applicant

Serial No. 10/020,362  
Reply to Office Action of October 7, 2005

BMB/gs  
GS-W:\Word Processing\bmb\Amendments\FGT10002-res.doc

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"**

"EXPRESS MAIL" MAILING LABEL NUMBER EV 669542 308 US

DATE OF DEPOSIT January 6, 2006

I hereby certify that this paper or fee (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service "Express Mail Post Office To Addressee" Service under 37 CFR 1.10 on the date indicated above and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Janice R. Kuehn  
Janice R. Kuehn